

ABSTRACT OF THE DISCLOSURE

An improved process for synthesizing 4-amino-1,2,4-triazole. Hydrazine hydrate solution is mixed into ethyl formate, ethanol, and an acidic ion exchange resin in a condenser. The solution is held at 75 degrees Celsius until no more liquid exits the condenser. The solution is then heated to between 130 and 133 degrees Celsius and kept at this temperature long enough to remove water and ethanol and to complete the synthesis. The solution is then cooled to 60 degrees Celsius and filtered to remove the ion-exchange resin. The filtered liquid is then cooled to ambient temperature.